

INTERNATIONAL SEARCH REPORT

national application No.

PCT/KR2004/001370

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 C07D 239/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC:C07D, A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean patents and applications for inventions since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
REGISTRY(STN), CAPLUS(STN)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| A | KR 01-61856 A (DONGWHA PHARMACEUT. CO., LTD.) 7 JULY 2001 see the abstract | 1-10, 12 |
| A | Jun Lu et al., "One-pot synthesis of 3,4-dihydropyrimidin-2(1H)-ones using lanthanum chloride as a catalyst", Tetrahedron Letters, 2000, Vol.41, pp.9075-9078 | 1-10, 12 |
| A | KR 01-48569 A (DONGWHA PHARMACEUT. CO., LTD.) 15 JUNE 2001 see the abstract | 1-10, 12 |
| P, A | Gowravaram Sabitha et al., "Vanadium(III) chloride catalyzed Bignelli condensation:solution phase library generation of dihydropyrimidin-(2H)-ones", Tetrahedron Letters, 18 August 2003, Vol. 44, NO. 34, pp.6497-6499 | 1-10, 12 |
| A | Christian Oliver Kappe et al., "Synthesis and reaction of "Bignelli Compounds". Part I", Journal of Heterocyclic chemistry, 1989, Vol. 26, No. 55, pp.55-64 | 1-10, 12 |

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

31 AUGUST 2004 (31.08.2004)

Date of mailing of the international search report

31 AUGUST 2004 (31.08.2004)

Name and mailing address of the ISA/KR



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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 11
because they relate to subject matter not required to be searched by this Authority, namely:
The subject matter of claim 11 is directed to a method for the treatment or prevention of hepatitis C.
Therefore, claim 11, directed to therapeutical and prophylactic methods of the human body and is subject matter which the International Searching Authority is not required to search under Article 17.(2)(a)(i) and Rule 39.1(iv)PCT.
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any addition fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

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International application No.

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| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---------------------|----------------------------|---------------------|
| KR 01-61856 A | 07.07.2001 | None | |
| KR 01-48569 A | 15.06.2001 | None | |